

**Introduction:** The guidelines that determine whether a given map is permissible or preferable are usually found in the state constitution for each state. These rules can vary significantly from state to state and are almost never written with any sort of mathematical specificity. Thus, if we are going to do some quantitative analysis of redistricting plans, we first need to **operationalize** the legislative text, which means turning legal language into mathematical functions to evaluate. This is not a well-defined process and there are many modeling decisions that have to be made for each state independently, incorporating additional guidance from the legislature and subcommittees, historically acceptable plans, and litigation history, among others.

**Goal(s):** Experience the operationalization process. Understand the role of mathematical modeling in redistricting analysis. Evaluate potential hierarchies and tradeoffs between criteria.

**Activity:** Pair up and select a couple of the states below to extract the relevant redistricting criteria from the linked document (usually the state constitution or rules code). You might also choose a different state and go searching for the relevant text (also a useful skill!). Once you have decided on the criteria you think are appropriate, navigate to [districtr.org](https://districtr.org) and scroll down to the map of the US to select your state. Try to draw a plan that is as ‘fair’ (or unfair!) as possible, following the criteria that you identified. When you are finished, click the share button in the upper right and paste the link back in this doc.

You can find summary information for more states from the National Council of State Legislatures [here](#), [All About Redistricting](#), or [Ballotpedia](#) which covers a lot of the litigation history as well.

State	Rules/Criteria	Districtr Link
Kansas ( <a href="#">Link</a> )		
Iowa ( <a href="#">Link</a> )		
Georgia ( <a href="#">Link</a> )		
Arizona ( <a href="#">Link</a> )		
Colorado ( <a href="#">Link</a> Starts in Section 46)		
Maine ( <a href="#">Link 1</a> and <a href="#">Link 2</a> Article 4 Section 2)		
Massachusetts ( <a href="#">Link</a> Article CI)		
Minnesota ( <a href="#">Link 1</a> and <a href="#">Link 2</a> )		
New Mexico ( <a href="#">Link</a> )		
Virginia ( <a href="#">Link</a> )		

**Discussion Questions:** Once you’ve completed the exercise, use the following questions to reflect on this exercise (we’ll also discuss them together in a little bit):

1. How many criteria are listed in the constitution?
2. Are any of these criteria surprising to you?
3. Are there criteria that aren’t listed that still must be applied?
4. What is/are the most important criteria, according to the legislative text?
5. Is a plan that satisfies these criteria guaranteed to be fair? Why or why not?
6. What differences are there between the state legislative rules and the Congressional rules.
7. Would partisan gerrymandering be permitted under these constraints? What about other types of gerrymandering? Does it matter which types of districts are under consideration?

